

(12) United States Patent

Chivilikhin et al.

(54) INTEGRATED CYCLONE SEPARATION DEVICE

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(57)ABSTRACT

Cyclonic separation devices and fluid stream separating apparatuses incorporating cyclonic separation devices are described. A cyclonic separation device may include an exterior housing having an exterior cylindrical portion and an exterior conical portion extending from the exterior cylindrical portion and an interior housing having an interior cylindrical portion and an interior conical portion extending from the interior cylindrical portion. The interior housing is

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